

EDITORIAL NOTES.

MR. W. C. WERNER, of Painesville, Ohio, found, in 1881, specimens of *Lactuca Scariola*, L., along the L. S. & M.^cS. R. R., where it has settled down to stay.

FASCICLES X AND XI of Ellis' Fungi of North America will be issued soon. Fascicle XI is to be devoted to *Uredinea*, and promises to be very interesting.

DR. H. CHRIST, Rue de l'Arbre, 5, Basel, Switzerland, is engaged upon a revision of the European Carices and desires to procure by exchange or purchase American specimens for comparison.

PROFESSOR BURRILL names the bacteria causing the blight of pear trees, the poison of poison ivy, and the epidemic disease of chinch bugs, respectively *Micrococcus amylocornis*, *M. toxicatus*, and *M. insectorum*.

II. PICK FINDS that the palisade tissue of the upper surface of leaves grown in the shade has shorter cells than that of similar leaves grown in the sunlight. In some cases the palisade cells were round or even elongated parallel to the surface.

DR. GEO. M. STERNBERG, of the U. S. Yellow Fever Commission, is preparing a work on Photomicrographs and how to make them, which will supply much needed information to those who desire to use this valuable method of illustrating what the microscope reveals.

DR. GOODALE has imported from Germany a number of pieces of very valuable apparatus for investigations in physiological botany at the Harvard botanical laboratory. It is the only collection of the kind in this country, and on account of its expensiveness will doubtless be so for some time.

MR. THOS. MEEHAN in observing *Stapelia bifonia* discovered that the axillary buds, in the normal condition of the plant, produce branches only, the flowers coming only from the weaker lateral accessory buds. But when the vegetative power of the plant is weakened, as by drying out, the axillary buds become the flowering ones,

MR. H. N. PATTERSON, of Oquawka, Ill., has ready for delivery his first box of North American genus labels, from *Ranunculaceae* to *Compositae*, 650 genera, 3 of each. We have never seen anything more neat and convenient and would most heartily recommend them to botanists as just the thing to paste upon their genus covers. The set mentioned above costs \$1.30.

THE BULLETIN OF THE BUFFALO NATURALISTS' FIELD CLUB is the title of a new publication and a most creditable one it is. Nos. 1 & 2 are before us and contain among botanical articles, "The Dissemination of plants," by Miss Edna M. Porter, and "Adventives in East Buffalo," by J. F. Cowell. The "Botanical Notes" are mostly written by David F. Day, and of course are very interesting. We wish the new club every success.

AN INVITATION couched in graceful terms and written in the French language has been extended by the Imperial Society of Horticulture of St. Petersburg to all botanists, to attend an international Congress of Botanists and Horticulturists in that city upon the 5th (17th) of May. We learn from the circular that the official language of the congress will be French, but any one is free to express himself in his national tongue. The papers will be limited to 30 minutes. The distinguished committee who issue the call offer to facilitate the journey of every botanist by advice; and to make his stay in the capital agreeable. It is to be hoped that the United States will be represented.

CURRENT LITERATURE.

The Bacteria. By T. J. Barrill, Ph. D. From the eleventh report of the Illinois Industrial University. 8 vo. 65 pp., Springfield, 1892. —No subject connected with botany now commands more general interest, while requiring the highest technical knowledge and skill, than that of the bacteria. The present brochure of sixty-five closely packed pages is a timely contribution. It is specially to be commended as an entertaining and concise *resumé* of the subject, both for the general reader only interested to know what bacteria are and how they affect domestic and commercial matters, and for the specialist who wishes the latest information. Dr. Sternberg's translation of Magnin's work is the only other treatise of the kind in the English language. The low price at which the present equally valuable work is issued (50 cts.) ought to ensure a wide perusal. The more serviceable part for the possessor of a good microscope is the systematic portion, filling half the pamphlet. This consists of keys to the genera, and descriptions of genera and species, with notes and synonymy. It is largely a conscientious translation of that part of the first number of Winter's edition of Rabenhorst's *Kryptogamen-Flora von Deutschland, Oesterreich, und der Schweiz* pertaining to bacteria (*Schizomycetes*) and to the closely related yeast plants (*Saccharomycetes*). This brings the most valuable classification with descriptions yet published within the reach of those unfamiliar with the German language. The author interpolates in brackets quite a number of doubtful or unsettled species mostly by Hallier, descriptions of three new species, and names for the species causing hog cholera and chicken cholera.

The Colors of Flowers, as Illustrated by the British Flora; by Grant Allen. (Nature Series, Macmillan & Co., London.)—

This little book deserves well its place in the popular "Nature Series" for it presents a theory in explanation of the coloring of flowers, which seems at first reading extremely plausible *a priori* and apparently so well borne out by the facts that one is almost tempted to accept it without examining closely the foundations on which it rests or the facts to which it appeals for support. The author's first task is to prove that, contrary to the commonly accepted doctrine of morphology, "petals are in all probability enlarged and flattened stamens, which have been set apart for the special work of attracting insects." As a corollary of this proposition it is stated that "as the stamens of almost all flowers * * * are yellow, it would seem naturally to follow that the earliest petals would be yellow too," and as "the earliest and simplest types of existing flowers are almost always yellow, seldom white and never blue, this in itself would be sufficient ground for believing that yellow was the orig-